### Commonwealth of Kentucky

**Environmental and Public Protection Cabinet Department for Environmental Protection** 

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

**Final** 

### AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Owensboro Specialty Polymers, LLC

Mailing Address: 5529 US HWY 60 East, Owensboro, KY 42303

Source Name: Owensboro Specialty Polymers, LLC

Mailing Address: 5529 US HWY 60 East

Owensboro, KY 42303

**Source Location:** Same as above

Permit ID: F-07-029

Agency Interest #: 972

Activity ID: APE20060003

**Review Type:** Conditional Major, Operating

Source ID: 21-059-00155

**Regional Office:** Owensboro Regional Office

3032 Alvey Park Dr. W., Suite 700

Owensboro, KY 42303

(270) 687-7304

**County:** Daviess

**Application** 

Complete Date: January 15, 2007 Issuance Date: August 17, 2007

**Revision Date:** 

**Expiration Date:** August 17, 2012

John S. Lyons, Director Division for Air Quality

Revised 09/29/06

#### TABLE OF CONTENTS

SECTION	ISSUANCE	PAGE
A. PERMIT AUTHORIZATION	Initial	1
B. EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Initial	2
C. INSIGNIFICANT ACTIVITIES	Initial	6
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Initial	7
E. SOURCE CONTROL EQUIPMENT REQUIREMENTS	Initial	8
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Initial	9
G. GENERAL PROVISIONS	Initial	12
H. ALTERNATE OPERATING SCENARIOS	Initial	18
I. COMPLIANCE SCHEDULE	Initial	18
J. APPENDIX A	Initial	19

	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-05-053	Initial Issuance	APE20050004	August 3, 2005	September 21, 2005	Renewal Title V Permit
F-07-029	Initial Issuance	APE20060003	April 28, 2007		Initial Conditional Major Permit

**Permit Number:** <u>F-07-029</u> **Page:** 1 **of** 24

#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: F-07-029 Page: 2 of 24

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

NOTE: FOR A DESCRIPTION OF THE EQUIPMENT IN EACH REACTOR TRAIN, SEE APPENDIX A

Emission Points	Description	Maximum Hourly Rate (lb/hr)	Emission Factor Basis
07	DAXAD (Reactor Train R-360) Installation Date: 8/1958	352.8 / batch	
08	DARAN (Reactor Train R-200) Installation Date: 5/1961	547.7 / batch	
09	DARAN (Reactor Train R-210) Installation Date: 4/1967	618.3 / batch	
10	DARAN (Reactor Train R-220) Installation Date: 7/1985	1197.8 / batch	
11	DARAN (Reactor Train R-230) Installation Date: 6/1958	1151.9 / batch	Engineering
18	DARAN (Reactor Train R-51) Installation Date: 6/1958	858.1 / batch	Estimate
12	Specialty R-1117 (Reactor Train R-650) Installation Date: 7/1997	195.7 / batch	
14	Specialty R-1117 (Reactor Train R-450) Installation Date: 7/1997	390.8 / batch	
13	PVA (Reactor Train R-157) Installation Date: 5/1969	1182.9 / batch	
16	Raw Materials Tank Farm Installation Date: 1/1959	0.2800	

#### **APPLICABLE REGULATIONS:**

**401 KAR 63:020**, *Potentially hazardous matter or toxic substances*, applies to the toxic emissions. NOTE: No emission limitations are listed in this permit because OSP has demonstrated compliance with this regulation using the Industrial Source Complex Short Term 3 (ISCST 3) modeling algorithm to calculate emission concentrations.

**40 CFR 60 Subpart Kb, Section 60.116b (b)**, *Standards of performance for volatile organic liquid storage vessels* (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, applies to raw material storage tanks.

#### 1. **Operating Limitations:**

None

#### 2. <u>Emission Limitations</u>:

Permit Number: F-07-029 Page: 3 of 24

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Compliance Demonstration Method:**

- a. The United States Environmental Protection Agency's Office of Air Quality Planning and Standards, Emission Factor and Inventory Group's "Tanks" program, version 3.1 or later, shall be used to calculate emissions from the raw material storage tanks.
- b. Initial tank modeling must be completed within 120 days of permit issuance date.

#### 3. <u>Testing Requirements:</u>

None

#### 4. Specific Monitoring Requirements:

For the raw materials tank farm, OSP shall keep records as required by 40 CFR 60 Subpart Kb, Section 60.116b (b).

#### 5. **Specific Recordkeeping Requirements:**

The total number of batches of each product family produced (e. g., DAXAD, DARAN, etc.) and the average weight of each batch shall be recorded on a monthly basis. Tank modeling results must be available for inspection.

#### **Specific Reporting Requirements:**

None

#### 7. Specific Control Equipment Operating Conditions:

Permit Number: F-07-029 Page: 4 of 24

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 17 Wastewater Treatment Tank System

Emission Points	Description	Maximum Hourly Rate (lb/hr)	Emission Factor Basis
17	Wastewater Treatment Tank System Installation Date: 1/1999	0.8920	Engineering Estimate

#### **Description:**

Wastewater from the reactor trains is collected and transmitted to the wastewater treatment tank system, which consists of a series of concrete tanks that equalize and pretreat the wastewater stream. The three chambered concrete tank system was installed in 1999 and has three 7.5 hp aerators (one per chamber) and a total capacity of 240,000 gallons.

#### **APPLICABLE REGULATIONS:**

**401 KAR 63:020**, *Potentially hazardous matter or toxic substances*, applies to the toxic emissions. [April 9,1972] NOTE: No emission limitations are listed in this permit because OSP has demonstrated compliance with this regulation using the Industrial Source Complex Short Term 3 (ISCST 3) modeling algorithm to calculate emission concentrations.

#### 1. **Operating Limitations:**

None

#### 2. <u>Emission Limitations</u>:

None

#### 3. Testing Requirements:

None

#### 4. Specific Monitoring Requirements:

None

#### 5. **Specific Recordkeeping Requirements:**

None

#### **6.** Specific Reporting Requirements:

None

#### 7. <u>Specific Control Equipment Operating Conditions</u>:

Permit Number: F-07-029 Page: 5 of 24

#### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	Welding (Max Usage: 2000 lbs/year of welding rods)	401 KAR 63:010
2.	Painting (Max Usage: 500 gals/year of paint)	401 KAR 63:010
3.	Paint Solvent (Max Usage: 500 gals/year of mineral spirit)	None
4.	Mechanical Parts Cleaning (Max Usage: 250 gals/year of Safety Kleen solvent)	None
5.	Laboratory Solvents (Max Usage: 250 gals/year of solvents)	None
6.	Pesticides and Herbicides (Max Usage: 200 lbs/year)	None
7.	Emergency Electric Generator (423 Hp, used for >500 hrs/year)	) None
8.	Polymers Loading and Packaging Operations (Maximum of 28,452 tons/year of solids, dry basis)	None
9.	Sand Blasting Operations (Max Usage: 5000 lbs/year of sand)	401 KAR 61:020 401 KAR 63:010
10.	Polyvinyl Acetate process product storage tanks & vents (Maximum of 5,181 tons/year of solids, dry basis) Emission points: VT 3403 – 1,2,3,4,5,6,7,8,9,10,11,12; VT 3404 – 2,4,7 & 8	None
11.	Polyvinylidene Chloride process product storage tanks & vents (Maximum of 19,157 tons/year of solids, dry basis) Emission points: VT 1103 – 1,2; VT 1104 – 4,5 & 7; VT 1301 – 6; VT 1303 – 1 & 5; VT 1308 – 8,9,10,11,12,13	None
12.	Acrylic polymer process product storage tanks & vents (Maximum of 1,545 tons/year of solids, dry basis) Emission points: VT 1501 – 2,3,5	None

Permit Number: F-07-029 Page: 6 of 24

#### **SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

Description Generally Applicable Regulation 13. Methyl Acrylate Storage Tank (Capacity 15,000 gals, Max Throughput 2,160,146 lbs/year) Vent ID: VT 3000 –1 None 14. Butyl Acrylate Storage Tank (Capacity 20,000 gals, Max Throughput 1,125,801 lbs/year) Vent ID: VT 3000 – 2 None 15. 2-Ethyl Hexyl Acrylate Storage Tank (Capacity 9,800 gals, Max Throughput 774,487 lbs/year) Vent ID: VT 3000 – 3 None 16. Di-n-Butyl Maleate Storage Tank (Capacity 20,000 gals, Max Throughput 2,354,082 lbs/year) Vent ID: VT 3000 – 4 None 17. Hexylene Glycol Storage Tank (Capacity 15,000 gals, Max Throughput 768,185 lbs/year) Vent ID: VT 3000 – 8 None 18. Glacial Methacrylic Acid Storage Tank (Capacity 8,000 gals, Max Throughput 105,497 lbs/year) Vent ID: VT 1104 – 26 None

Permit Number: F-07-029 Page: 7 of 24

# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any fifty-two (52) consecutive weeks.

- 2. Total volatile organic compounds (VOC) or organic hazardous air pollutant (HAPS) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. As a voluntary source-wide emissions cap to preclude the applicability of 401 KAR 52:020, Title V Permits, emissions of the VOC shall not equal or exceed 90 tons per year, and emissions of single and combined HAPs shall not equal or exceed 9.5 and 23.75 tons per year, respectively. A year is defined as any consecutive fifty-two (52) week period.

#### **Compliance Demonstration Method:**

Compliance with the annual emissions and processing limitations imposed pursuant to 401 KAR 52:030, Section 1, and contained in this permit, shall be based on the sum of the weekly emission rates from each emission point (i.e., **Sections B**) during each fifty-two (52) consecutive week period. The weekly emission rates shall be defined as the sum of the products of the processing rates multiplied by each respective emission factor for each emission point. The permittee shall maintain weekly records, readily accessible to Division personnel upon request, of source wide emission and processing rates.

Permit Number: F-07-029 Page: 8 of 24

### SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Permit Number: F-07-029 Page: 9 of 24

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

**Permit Number:** <u>F-07-029</u> **Page:** 10 **of** 24

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**Permit Number:** <u>F-07-029</u> **Page:** 11 **of** 24

# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Drive W., Suite 700
Owensboro, KY 42303-2191
Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

- 10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
- 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
  - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

**Permit Number:** <u>F-07-029</u> **Page:** 12 **of** 24

#### **SECTION G - GENERAL PROVISIONS**

#### 1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12:
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

**Permit Number:** <u>F-07-029</u> **Page:** 13 **of** 24

#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

**Permit Number:** <u>F-07-029</u> **Page:** 14 **of** 24

#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

#### 2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

#### 3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**Permit Number:** <u>F-07-029</u> **Page:** 15 **of** 24

#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

None

#### 5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

#### 6. Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### 7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

**Permit Number:** <u>F-07-029</u> **Page:** 16 **of** 24

#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(2) The permitted facility was at the time being properly operated;

- (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
- (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
- (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

#### 8. Ozone depleting substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**Permit Number:** <u>F-07-029</u> **Page:** 17 **of** 24

#### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### 9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**Permit Number:** <u>F-07-029</u> **Page:** 18 **of** 24

#### **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

### **SECTION I - COMPLIANCE SCHEDULE**

**Permit Number:** <u>F-07-029</u> **Page:** 19 **of** 24

#### **APPENDIX A**

#### 07 DAXAD (Reactor train R-360)

#### **<u>Description:</u>** Primary components are:

1. Reactor R-360 with vents

VT 1501-1 (manual vent on R-360 via condenser H-R360)

VT 1504-1 (manual vent on R-360)

VT 1504-3 (emergency vent for R-360)

2. Distillation tank V-302 with vent

VT 1504-2 (vacuum receiver V-302 steam ejector vent for R-360)

3. Recovered 50 % methanol storage tank V-304 with vent

VT 1501-3

4. Reboiler of distillation still BO-342 with vent

VT 1501-2 (emergency vent)

5. Distillation still condenser H-D342 with vent

VT 1504-4 (breather vent)

6. Overhead receiver tank V-343 with vent

VT 1504-5

7. Remeth tank V-341 with vent

VT 3001-2

8. Fugitives:

2 light liquid pumps

45 light liquid valves

2 PR valves

376 flanges and connectors

2 open-ended lines

20 sampling connections

#### 08 DARAN (Reactor train R-200)

#### **Description:** Primary components are:

1. "A" Monomer mix tank V-201 with vents

VT 1301-1 (manual/emergency vent on tanks V-201 and V-211)

### VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

- 2. DESM tank V-205 (open top)
- 3. "A" Continuous catalyst tank V-203 with vent

VT 1308-10

4. SEDAR tank V-207 with vent

VT 1301-6

**Permit Number:** <u>F-07-029</u> **Page:** 20 **of** 24

#### **DARAN** (Reactor train R-200) (Continued)

5. "A" Reactor R-200 with vents

VT 1301-2 (manual/emergency vent on reactor R-200)

### VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

6. Pre-stripped latex tanks V-241 and V-242 (PSLT 1 and 2) with vent

VT 1308-6 (manual vent on PSLTs 1 and 2)

7. "A" Stripper S-200 in series with "A" condenser H-200 and "A" vacuum receiver VR-H200, with vent

VT 1308-3 (two-stage steam ejector (vacuum) vent for the "A" stripper)

8. Stripped latex tanks V-251 and V-252 (SLT 1 and 2) with vents

VT 1308-8 (steam ejector (vacuum) vent for SLTs 1, 2, 3, and 4, and

VT 1308-12 (manual vents on SLTs 1 and 2)

9. Fugitives:

1 light liquid pump

1 gas/vapor valve

32 light liquid valves

2 heavy liquid valves

2 PR valves

258 flanges/connectors

2 open-ended lines

6 sampling connections

#### 09 DARAN (Reactor train R-210)

#### **<u>Description:</u>** Primary components are:

1. "B" Monomer mix tank V-211 with vents

VT 1301-1 (manual/emergency vent on tanks V-201 and V-211)

VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

- 2. DESM tank V-215 (open top)
- 3. "B" Continuous catalyst tank V-213 with vent

VT 1308-11

4. SEDAR tank V-207 with vent

VT 1301-6

5. "B" Reactor R-210 with vents

VT 1301-3 (manual/emergency vent on reactor R-210)

VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

6. Pre-stripped latex tanks V-243 and V-244 (PSLT 3 and 4) with vent

VT 1308-7 (manual vent on PSLTs 3 and 4)

7. "B" Stripper S-210 in series with "B" condenser H-210 and "B" vacuum receiver VR-H210, with vent

VT 1308-4 (two-stage steam ejector (vacuum) vent for the "B" stripper)

**Permit Number:** <u>F-07-029</u> **Page:** 21 **of** 24

#### 09 DARAN (Reactor train R-210) (Continued)

8. Stripped latex tanks V-253 and V-254 (SLT 3 and 4) with vents

VT 1308-8 (steam ejector (vacuum) vent for SLTs 1, 2, 3, and 4, and VT 1308-13 (manual vents on SLTs 3 and 4)

- 9. Fugitives:
  - 2 light liquid pump
  - 1 gas/vapor valve
  - 31 light liquid valves
  - 2 heavy liquid valves
  - 1 PR valve
  - 257 flanges/connectors
  - 2 open-ended lines
  - 6 sampling connections

#### 10 DARAN (Reactor train R-220)

#### **<u>Description:</u>** Primary components are:

1. "C" Monomer mix tank V-211 with vents

VT 1301-4 (manual/emergency vent on tank V-221)

VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

2. DESM tank V-225 with vent

*VT-1308-9* 

- 3. "C" Continuous catalyst tank V-223
- 4. SEDAR tank V-207 with vent

VT 1301-6

5. "C" Reactor R-220 with vents

VT 1301-4 (manual/emergency vent on reactor R-220)

VT 1308-1 (steam ejector (vacuum) vent for monomer mix tanks A, B, and C, and reactors A, B, and C)

6. "C" Stripper S-220 in series with "C" condenser H-220 with vents

VT 1308-5 (two-stage steam ejector (vacuum) vent for the "C" stripper)

VT-1308-2 (manual vent on "C" stripper S-220)

- 7. Fugitives:
  - 1 light liquid pump
  - 1 gas/vapor valve
  - 31 light liquid valves
  - 2 heavy liquid valves
  - 1 PR valve
  - 257 flanges/connectors
  - 2 open-ended lines
  - 6 sampling connections

**Permit Number:** <u>F-07-029</u> **Page:** 22 **of** 24

#### 11 DARAN (Reactor train R-230)

#### **Description:** Primary components are:

1. Monomer mix tank V-231 with vents

VT 1104-18 (emergency vent on tank V-231)

VT 1104-23 (vent for monomer mix tank V-231)

2. Continuous catalyst tank V-233 with vent

VT 1304-2

3. SEDAR tank V-207 with vent

VT 1301-6

4. Glacial methacrylate tank V-701 with vent

VT 3004-1

5. Reactor R-230 with vents

VT 1301-7 (manual/emergency vent on reactor R-230)

VT 1304-1 (steam ejector vent for reactor R-230)

6. Fugitives:

1 heavy liquid pump

31 light liquid valves

1 heavy liquid valve

1 PR valve

257 flanges/connectors

3 open-ended lines

7 sampling connections

#### 18 DARAN (Reactor train R-51)

#### **<u>Description:</u>** Primary components are:

1. Monomer mix tank V-34 with vents

VT 1104-18 (emergency vent on monomer mix tank V-231)

VT 1104-23 (manual vent on monomer mix tank V-231)

2. Continuous feed tank V-653 with vent

VT 6004-1

3. Continuous feed tank V-654 with vent

VT 6004-2

4. Glacial methacrylate tank V-701 with vent

VT 3004-1

5. Reactor R-51 with vents

VT 1104-1 (steam ejector vent on reactor R-51)

VT 1104-12 (steam out vent for reactor R-51)

VT 1104-25 (manual/emergency vent for R-51)

6. Condenser H-R51 with vents

VT 1104-12

VT 1104-38

7. Vacuum receiver VR-R51 with vent

VT 1104-7 (emergency vent for R-51 vacuum receiver)

**Permit Number:** <u>F-07-029</u> **Page:** 23 **of** 24

#### 12 SPECIALTY (Reactor train R-650)

**Description:** Primary components are:

1. Monomer mix tank V-652 with vent

VT 6004-3 (manual vent on monomer mix tank V-652)

2. Reactor R-650 with vents

VT 6001-1 (manual vent on reactor R-650)

VT 6001-2 (emergency vent on reactor R-650)

VT 6004-2 (emergency vent on reactor R-650)

3. Fugitives:

1 light liquid pump

4 gas/vapor valves

54 light liquid valves

1 PR valve

66 flanges/connectors

1 sampling connection

#### 14 SPECIALTY (Reactor train R-450)

**Description:** Primary components are:

1. Reactor R-460 with vents

VT 1604-3 (steam ejector vent through vacuum receiver VR-450 for reactors R-450 and R-460 and tank V-451)

VT 1604-1 (manual vent for reactors R-450 and R-460)

VT 1604-4 (sampling hood vent from reactors R-450 and R-460)

2. Packaging hood with vent

VT 1603-1 (exhaust fan vent in Hypol packaging area)

3. Fugitives:

1 light liquid pump

2 heavy liquid pumps

4 gas/vapor valves

2 light liquid valves

32 heavy liquid valves

3 heavy liquid agitators

167 flanges/connectors

5 open-ended lines

9 sampling connections

#### 13 PVA (Reactor train R-157)

**Description:** Primary components are:

1. Monomer mix tank V-130 with vent *VT 3404-1* 

**Permit Number:** <u>F-07-029</u> **Page:** 24 **of** 24

#### 13 PVA (Reactor train R-157) (Continued)

2. Styrene addition tank SB-V130 with vent

VT 3404-2

3. Feed tanks V-120 and V-121 with vent

VT 3404-3

4. Styrene addition tank SB-R157 with vent

VT 3404-4

5. Emulsifier tanks V-128 and V-129 with vent

VT 3404-8 (vents through exhaust fan)

6. Reactor R-157 with vents

VT 3404-5 (steam ejector vent through condenser HR-157 and vacuum receiver VR-157)

VT 3401-1 (steam ejector vent for reactor R-157)

7. Condenser HR-157 with vent

VT 3404-6 (manual vent for condenser HR-157 and vacuum receiver VR-157)

8. Vacuum receiver VR-157 with vent

VT 3404-6 (manual vent for condenser HR-157 and vacuum receiver VR-157)

9. Fugitives:

3 light liquid pumps

4 heavy liquid pumps

3 gas/vapor valves

83 light liquid valves

38 heavy liquid valves

3 PR valves

1 light liquid agitator

1024 flanges/connectors

9 open-ended lines

26 sampling connections